

Work Assignment No. 226-RARA-053J, Contract EP-S5-06-01

USS Lead Superfund Site OU1 - Zone 3 Residential Soil Remedial Action

Owner Requests and Potential Changes

Revision Date: WE 6-9-17

No.	Property Address	Owner	Owner Request/Potential Change	Schedule Impacts	Estimated Cost
1	Non Responsive	Non Responsive	Remove two (2) 12- 30" diameter trees in front yard area and grind stumps / EPA verbal Approval to Home owner (T. Drexler 3-13-17). CH2M Rep.-Shanahan	~1 day	\$8,400
2	Non Responsive	Non Responsive	Remove one (1) 35" diameter tree in back yard area and grind stump / EPA verbal Approval to Home owner (T. Drexler 3-13-17). CH2M Rep.-Shanahan	~ 0.5 day	\$6,500
3	Non Responsive	Non Responsive	Grind (1) stump not listed on drawing / EPA verbal Approval to Home owner (T. Drexler 3-13-17). CH2M Rep.-Shanahan. Note Drawing shows 36" tree but it had been cut some time ago	~ 0.25 day	\$2,600
4	Non Responsive	Non Responsive	Grind (1) stump not listed on drawing / EPA verbal Approval to Home owner (T. Drexler 3-20-17). CH2M Rep.-Shanahan	~ 0.25 day	\$2,600
5	Non Responsive	Non Responsive	Remove two (2) 30" diameter trees in back yard area and grind stumps / EPA verbal Approval to Home owner (T. Drexler 3-20-17). CH2M Rep.-Shanahan Note: Only remove trees if Subcontractor needs them removed for alley access per Tim Drexler	~1 day	See line 52
6	Non Responsive	Non Responsive	Remove lattice around deck and scrape 6" of soil out. Replace with gravel. Per Tim Drexler 3-20-17. Note: Area not shown on design drawing. Assumes 1 hour for misc laborer crew to remove and replace lattice, 3 cy of additional excavation, and 6 inches of gravel (\$415 + \$576 + \$591)	~ 0.25 day	\$1,582
7	Non Responsive	Non Responsive	Excavate 1.5 foot x ~20 foot strip along southern garage driveway / EPA verbal Approval to Home owner (T. Drexler 3-20-17). CH2M Rep.-Shanahan. Assumes 1 cy of additional excavation, one cubic yard of backfill, and 30 sq ft of sod. (\$197 + \$150 + \$32)	< 0.25 day	\$379
8	Non Responsive	Non Responsive	Excavate (6 inches deep) broken driveway area back yard area not shown for removal in design. / EPA verbal approval 3-21-17 Sarah Rolfes. CH2M Rep.-Shanahan. Assumes 5.55 cy of additional excavation, and installation of 300 sq of feet of backfill/gravel, at a unit rate of \$3.31 per square foot (\$1095 + \$993)	< 0.25 day	\$2,088
9	Non Responsive	Non Responsive	Remove (1) 15" tree and grind stump back yard area / EPA verbal approval to home owner 3-21-17 Sarah Rolfes. CH2M Rep.-Shanahan	~ 0.25 day	\$4,200
10	Non Responsive	Non Responsive	Remove and grind (1) 10 conifer tree in front yard area against house EPA verbal approval to home owner 3-21-17 Sarah Rolfes. CH2M Rep.-Shanahan	~ 0.25 day	\$2,950

11	Non Responsive	Non Responsive	Remove / grind (1) 12"stump back yard area / EPA verbal approval to home owner 3-21-17 Sarah Rolfes CH2M Rep.-Shanahan	< 0.25 day	\$2,600
12	Non Responsive	Non Responsive	Remove / grind (2) stumps back yard area (1 x 10" and 1 X 30"/ EPA verbal approval to home owner 3-22-17 Charles Rodriguez CH2M Rep.-Shanahan	< 0.50 day	\$5,200
13	Non Responsive	Non Responsive	Remove / grind (4) stumps back yard area (2 x 6" and 2 X 3") / EPA verbal approval to home owner 3-22-17 Sarah Rolfes- CH2M Rep.-Shanahan (Note owner stated that he was going to cut a 6" tree to a stump prior to remediation) This is captured in the 2 x 6" above.	< 0.25 day	\$10,400
14	Non Responsive	Non Responsive	Excavate (1 foot deep) and restore~ 15' x 15' area covered by loose pavers (100 ct) and metal awning (no cover on awning). Not shown on design drawing EPA approval 3-22-17 Sarah Rolfes / CH2M Rep. Mike Shanahan. Assumes 2 hours of misc laborer crew time to remove and replace awning, 8.33 cy of additional excavation, 8.33 cy of additioanl backfill, and 225 sq feet of sod (\$830 + \$1642 + \$1250 + \$243)	~ 0.25 day	\$3,965
15	Non Responsive	Non Responsive	Remove / grind (1) stump in back yard area 1 X 30"/ EPA verbal approval to home owner 3-22-17 Sarah Rolfes CH2M Rep. Rob Plsek	~ 0.25 day	\$2,600
16	Non Responsive	Non Responsive	Remove / grind (1) stump in back yard area 1 X 8"/ EPA TBD 3-22-17 Sarah Rolfes CH2M Rep. Mike Shanahan	< 0.25 day	\$2,600
17	Non Responsive	Non Responsive	Remove / grind (2) trees back yard area (1 x 10.03" and 1 X 9.63")/ EPA verbal approval to home owner 3-24-17 Charles Rodriguez CH2M Rep.- Rob Plsek Note: Northen tree listed as 4" on design. Actual: 10.03" diameter	~ 0.50 day	\$5,900
18	Non Responsive	Non Responsive	Restore backyard area with gravel driveway around yard area as requested by homeowner. Net result appears deductive. 3-24-17 EPA Charles Rodriguez CH2M Rep.- Mike Shanahan. Note: cost evaluation sent to EPA 3-25-17. EPA approved 3/27/17 (Tom Alcamo email).	No Change	(\$2,450)
19	Non Responsive	Non Responsive	12' x 2' Planter area with landscape rock under awning not captured in design. Excavation depth 12". Restore with like materials. 3-27-17 verbal approval to homeowner by EPA's Charles Rodriguez. CH2M Rep.- Rob Plsek	~ 0.50 day	\$405
20	Non Responsive	Non Responsive	Grind (1) stump in front yard area (1 X 26") / EPA verbal approval to home owner 3-28-17 by Janet Pope. CH2M Rep. Rob Plsek	~ 0.25 day	\$2,600
21	Non Responsive	Non Responsive	Sarah from EPA on 3-29-17. determined that 4 specific areas in the backyard area were missed in the design. Area 1: consists of a 13' x 18' grass area NE of the garage area (Restore with Sod) and a 3' x 13' gravel strip area (restore with sod). Area 2: consists of 29' x 3' planter area along the south fence line (Restore planter back with no plants / to be used for a garden). Area 3 consists of a 50' x 3' gavel strip running along the south side of garage and west side of garage (Restore with sod). Area 4 consists of a 10' x 13' cracked and badly damaged 2" concrete slab area to be removed and soil removed underneath. This area is located north of the garage and west of zone 1. The existing excavation depth for the backyard is 12" in design.	~1.5 day	\$8,396

22	Non Responsive	Non Responsive	Grind (2) stumps in front yard area. EPA verbal approval to home owner 4-3-17 by Charles Rodriguez. CH2M Rep. Mike Shanahan	~ 0.25 day	\$5,200
23	Non Responsive	Non Responsive	20' x 2' Planter area with landscape rock (back yard area) not captured in design. Excavation depth 12". Restore with like materials. 4-03-17 verbal approval to homeowner by EPA's Charles Rodriguez. CH2M Rep.- Mike Shanahan	~ 0.25 day	\$675
24	Non Responsive	Non Responsive	13' x 7' excavation area not captuerd in design. Area is under a wheelchair ramp (Permanent structure as owner will not allow any removal). Excavation depth 6". Restore with sod. EPA verbal approval to property owner given on 4-4-17 by Charles Rodriguez EPA. CH2M Rep: Mike Shanahan	~ 0.25 day	\$2,314
25	Non Responsive	Non Responsive	15' x 4' walkway strip to front door (covered with gravel and placed pavers). This area was not captured in the design. Excavation depth to 12". Restore to original condition. All pavers should be able to be saved. EPA verbal approval to property owner given on 4-4-17 by Charles Rodriguez EPA. CH2M Rep: Mike Shanahan	~ 0.25 day	\$1,588
26	Non Responsive	Non Responsive	10' x 5' under front porch section not captured in design. EPA verbal approval by Tim Drexler EPA 4-6-17 after Charles deferred 4-4-17. This operation will require light carpentry work to remove interior framed lattice. EPA approved 4" excavation depth with 2" of fill and 2" of gravel restoration. No compaction. CH2M Rep: Mike Shanahan	~ 0.50 day	\$3,247
27	Non Responsive	Non Responsive	22' x 18" strip in back yard area not catured in design. Current condition is gravel and dirt. EPA Sarah Rolfes approved excavation and restotation 4-5-17. Excavation depth 12". Restore with landscape rock. CH2M Rep: Rob Plsek	~ 0.25 day	\$557
28	Non Responsive	Non Responsive	Remove / grind (1) stump in back yard planter area 1 X 3" / EPA 4-6-17. Tim Drexler verbal approval. CH2M Rep. Rob Plsek and Mike Shanahan	< 0.25 day	\$2,600
29	Non Responsive	Non Responsive	Added 2' x 25' gravel cover to 1" depth to improve look of finished driveway. Minimal excavation needed < 1" for gravel placement. Basically just a shave to place material to existing hard surface elevation. Verbal approval by Tin Drexler EPA 4-6-17. CH2M Rep: Mike Shanahan	< 0.25 day	\$963
30	Non Responsive	Non Responsive	Remove / grind (4) stumps. 1 in back yard area / 3 in front yard area. Verbal approval to home owner 4-07-17 Charles Rodriguez CH2M Rep.-Shanahan	~ 0.75 day	\$10,400
31	Non Responsive	Non Responsive	40' x 40' gravel / dirt area not captured in design. Area currently used as a parking area. Excavation depth 12". Restore with gravel. EPAs Charles Rodriguez to confirm approval with Tim Drexler. 4-7-17. CH2M Rep: Rob Plsek	~ 1.25 day	EPA Undecided TBD
32	Non Responsive	Non Responsive	Added two areas not captured in design. Area 1 is a 8' x 25' strip with an excavation depth of 6". Restore with Sod. Area 2 is a 5' x 4' strip with an excavation depth of 6". Restore with sod. EPA verbal approval to owner 4-10-17 by Tim Drexler. CH2M Rep. Rob Plsek	~ 0.25 day	\$1,582
33	Non Responsive	Non Responsive	Added two areas not captured in design. Area 1 is a 4' x 1' strip with an excavation depth of 6". Restore with sod. Area 2 is a 23' x 3' strip with an excavation depth of 6". Restore with sod. EPA verbal approval to owners 4-12-17 by Charles Rodriguez. CH2M Rep. Rob Plsek	~ 0.25 day	\$530
34	Non Responsive	Non Responsive	Added one 24" diameter tree for removal and stump grinding. EPA not present at meeting. CH2M Rep. Mike Shanahan given verbal approval over the phone from EPA's Tim Drexler and related approval to property owner: 4-13-17	~ 1.0 day	\$4,200
35	Non Responsive	Non Responsive	Added 3 trees for removal and replacement. Two 8" diameter spruce trees and one 5" diameter peach tree. EPA not Present. CH2M Rep Mike Shanahan / Emily Pasak. Tim Drexler Confirmed 4-18-17	~ 0.50 day	\$7,800
36	Non Responsive	Non Responsive	Remove one 18" diameter stump on east side of garage. CH2M Rep Rob Plsek, EPA Rep Sarah Rolfes	~ 0.25 day	\$2,600
37	Non Responsive	Non Responsive	Remove one 8" stump on SE corner of garage. EPA Rep Charles Rodriguez approved 4-20-17. CH2M Rep Emily Pasek	~ 0.25 day	\$2,600
38	Non Responsive	Non Responsive	Remove tree in NW backyard. EPA Rep Approved Charles Rodriguez 4-20-17. CH2M Rep Emily Pasek	~ 1.0 day	\$4,200

39	4931 Ivy	Juan Vicenta Rios	1' x 20' strip added on north side of house, 12" deep CH2M Rep Rob Plsek. 4-21-17. Need EPA Approval	~ 0.25 day	\$265
40	Non Responsive	Non Responsive	Grind three (3) stumps in backyard area. CH2M Rep Rob Custance. Approved EPA Rep. Sarah Rolfes 4-26-17	~ 0.25 day	\$7,800
41	Non Responsive	Non Responsive	Grind two (2) stumps in front yard area. CH2M Rep Rob Custance. Approved EPA Rep Charlez Rodriguez 4-26-17	~ 0.25 day	\$5,200
42	Non Responsive	Non Responsive	Grind one (1) stump in backyard area. CH2M Rep Rob Custance. Approved EPA Charlez Rodriguez 4-26-17	< 0.25 day	\$2,600
43	Non Responsive	Non Responsive	Grind four (4) stumps in backyard area. CH2M Rep Rob Custance. Approved EPA Rep Charlez Rodriguez 4-27-17	~ 0.25 day	\$10,400
44	Non Responsive	Non Responsive	Grind two (2) stumps. CH2M Rep Emily Pasek. Approved EPA Rep Sarah Rolfes 5-03-17	~ 0.25 day	\$5,200
45	Non Responsive	Non Responsive	Remove one (1) 30" diameter tree in back yard area and grind stump / EPA verbal Approval to Home owner (5-03-17). CH2M Rep.Emily Pasek, EPA Rep Sarah Rolfes 5-03-17	~0.25 day	\$4,200
46	Non Responsive	Non Responsive	Grind one (1) stump in backyard area. CH2M Rep Emily Pasek. Approved EPA Tim Drexler 5-10-17	~0.25 day	\$2,600
47	Non Responsive	Non Responsive	Restore entire property with gravel. Note that the Non Responsive owned by this owner is the vacant Non Responsive also. EPAs Tim Drexler approved. CH2M Rep present: Mike Shanahan 5-10-17	No Change	(\$2,211)
48	Non Responsive	Non Responsive	An approximate 18' x12' area of the excavation is covered with pavers. EPAs Charles Rodriguez approved the pavers as a permanent placement (not to be removed). Confirmed by Shanahan 5-11-17	Gain: .50 day	(\$1,425)
49	Non Responsive	Non Responsive	Replace 3 walkway concrete panels due to unevenness. EPA approved by Tim Drexler on 5/19/2017	~ 0.50 day	\$1,660
50	Non Responsive	Non Responsive	Remove one stump on the southern property line. EPA Approved by Tim Drexler on 5/17/2017	No Change	\$2,600
51	Non Responsive	Non Responsive	Excavate one additional L-shaped strip at the SE corner of property line. EPA approved by Sarah Rolfes on 5/22/2017	~0.25 day	\$1,120
52	Non Responsive	Non Responsive	Added the removal of one 30" tree in the SW corner of the property to gain access to the backyard. EPA approved by Charles Rodriguez on 5/24/2017	~ 1.0 day	\$4,200
53	Non Responsive	Non Responsive	Added the removal of one 4" tree and one 24" tree. EPA approved by Charles Rodriguez on 5/24/2017	~ 1.0 day	\$7,150
54	Non Responsive	Non Responsive	Added the removal of 5 trees, and added two excavation areas, one 4' x 8', and another that is 3' x 4'. EPA approved by Charles Rodriguez on 5/24/2017	~ 1.0 day	\$15,532
55	Non Responsive	Non Responsive	Added a 124" x 13" strip of excavation on the south side of the property. Approved by Charles Rodriguez on 5/23/2017	No Change	\$81
56	Non Responsive	Non Responsive	Add one stump removal and a 20' x 20' 18" deep excavation with sod replacement. Approved by Tim Drexler on 5/31/2017	~ 0.50 day	\$10,336

Running Total

\$201,880

CH2M Technical Status Report - Summary of Project Changes Table, Weekly Supplement

Task	Date	Change Description
RI.01	Mar-17	Non-responsive owners and additional time to secure access for remediation. Approximately 50 percent of residence owners (to date) have been non-responsive or have required additional effort to secure owner agreement for remediation access.
RI.01	Mar-17	Work Plan assumed five DustTrak units and associated networking devices (\$60,630) for particulate air monitoring equipment. Subsequent receipt of design plans, field planning, and detailed discussions with FIELDS group indicate that nine DustTrak units specially equipped by RAECO Rentals (\$184,320) and LINC/Gateway networking devices from Safe Environmental Engineering (\$48,740) will be required to be consistent with air monitoring in other areas at the site.
AN.01	Apr-17	Additional borrow sources were sampled to support the availability of sufficient borrow material (backfill and topsoil) to support project schedule. An additional 18 analytical, 26 grain size, and 8 geotechnical samples were obtained.
RI.01	Apr-17	Additional labor hours required to manage change associated with pre-construction meetings, substitutions of new high priority properties into 2017 for existing scoped properties, and conduct additional preconstruction outreach simultaneous with active construction.
RI.01	Jun-17	Additional labor hours required to manage change associated with ownership, access and coordination with SulTRAC for re-sampling at Non Responsive .

Cost Impact
Approximately 320 hours to date (~40 hrs/wk; ongoing).
~ \$172,400.
\$21,911
Approximately 280 hours to date (~70 hrs/wk; ongoing).
TBD

Cost Evaluation for Change Log Item No 19 (Non Responsive)
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Line Item	Qty	Unit	Unit Rate	Cost
Excavation	0.9	CY	\$180.00	\$160.00
Backfill	0.4	CY	\$148.00	\$65.78
Topsoil	0.4	CY	\$150.00	\$66.67
Decorative Rock	24	SF	\$4.70	<u>\$112.80</u>
		Subtotal		\$405.24

Cost Evaluation for Change Log Item No 21 (Back Yard at
 USS Lead, Zone 3, East Chicago, Indiana
 WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>Area 1 (13 x 18 and 3 x 13)</u>	Qty	Unit	Unit Rate	Cost
Excavation	10.1	CY	\$180.00	\$1,820.00
Backfill	5.1	CY	\$148.00	\$748.22
Topsoil	5.1	CY	\$150.00	\$758.33
Sod	273	SF	\$1.08	<u>\$294.84</u>
			Subtotal	\$3,621.40

<u>Area 2 (29 x 3 planter)</u>				
Excavation	3.2	CY	\$180.00	\$580.00
Backfill	1.6	CY	\$148.00	\$238.44
Topsoil	1.6	CY	\$150.00	<u>\$241.67</u>
			Subtotal	\$1,060.11

<u>Area 3 (50 x 3 area)</u>				
Excavation	5.6	CY	\$180.00	\$1,000.00
Backfill	2.8	CY	\$148.00	\$411.11
Topsoil	2.8	CY	\$150.00	\$416.67
Sod	150	SF	\$1.08	<u>\$162.00</u>
			Subtotal	\$1,989.78

<u>Area 4 (10 x 13 concrete slab)</u>					
Excavation	4.8	CY	\$180.00	\$866.67	
Backfill	2.4	CY	\$148.00	\$356.30	
Topsoil	2.4	CY	\$150.00	\$361.11	
Sod	130	SF	\$1.08	<u>\$140.40</u>	Sod is assumed for the
			Subtotal	\$1,724.47	

Estimated Cost Impact \$8,395.76

restored surface. CH2M is confirming.

Cost Evaluation for Change Log Item No 23 (Planter at 4829-31 Carey)

USS Lead, Zone 3, East Chicago, Indiana

WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Line Item	Qty	Unit	Unit Rate	Cost
Excavation	1.5	CY	\$180.00	\$266.67
Backfill	0.7	CY	\$148.00	\$109.63
Topsoil	0.7	CY	\$150.00	\$111.11
Decorative Rock	40	SF	\$4.70	<u>\$188.00</u>
		Subtotal		\$675.41

Cost Evaluation for Change Log Item No 24 (Excavation under

Non Responsive

USS Lead, Zone 3, East Chicago, Indiana

WA No. 226-RARA-053J / Contract No. EP-S5-06-01

<u>13' x 7' with 6" excavation</u>	Qty	Unit	Unit Rate	Cost
Excavation	1.7	CY	\$180.00	\$303.33
Topsoil	1.7	CY	\$150.00	\$252.78
Sod	91	SF	\$1.08	\$98.28
Miscellaneous Crew Support	4	HR	\$415.00	<u>\$1,660.00</u>
		Total		\$2,314.39

Mulch Replacement Instead of Sod

Sod	91	SF	\$1.08	-\$98.28
Mulch	91	SF	\$1.25	<u>\$113.75</u>
				\$2,329.86

Cost Evaluation for Change Log Item No 25

Non Responsive

USS Lead, Zone 3, East Chicago, Indiana

WA No. 226-RARA-053J / Contract No. EP-S5-06-01

<u>15' x 4' with 12" excavation</u>	Qty	Unit	Unit Rate	Cost
Excavation	2.2	CY	\$180.00	\$400.00
Backfill	2.2	CY	\$148.00	\$328.89
Gravel	12	SF	\$2.40	\$28.80
Miscellaneous Crew Support	2	HR	\$415.00	<u>\$830.00</u>
		Total		\$1,587.69

Cost Evaluation for Change Log Item No 26 (Under Porch at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>10' x 5' with 4" excavation</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.6	CY	\$180.00	\$111.11
Backfill	0.3	CY	\$148.00	\$45.68
Gravel	250	SF	\$2.40	\$600.00
Miscellaneous Crew Support	6	HR	\$415.00	<u>\$2,490.00</u>
		Total		\$3,246.79

Cost Evaluation for Change Log Item No 27 (Planter at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

Line Item	Qty	Unit	Unit Rate	Cost
Excavation	1.2	CY	\$180.00	\$220.00
Backfill	0.6	CY	\$148.00	\$90.44
Topsoil	0.6	CY	\$150.00	\$91.67
Decorative Rock	33	SF	\$4.70	<u>\$155.10</u>
		Subtotal		\$557.21

Cost Evaluation for Change Log Item No 29 (Driveway at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

Line Item	Qty	Unit	Unit Rate	Cost
Excavation	0.2	CY	\$180.00	\$27.78
Gravel	44	SF	\$2.40	\$105.60
Miscellaneous Crew Support	2	HR	\$415.00	<u>\$830.00</u>
			Subtotal	\$963.38

Cost Evaluation for Change Log Item No 32 (Excavate two additional areas not captured by original design- 4
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

<u>Area 1 (8' x 25' x 6" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	3.7	CY	\$180.00	\$666.67
Backfill	0.0	CY	\$148.00	\$0.00
Topsoil	3.7	CY	\$150.00	\$555.56
Sod	200	SF	\$1.08	<u>\$216.00</u>
			Subtotal	\$1,438.22

<u>Area 2 (5' x 4' x 6" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.4	CY	\$180.00	\$66.67
Backfill	0.0	CY	\$148.00	\$0.00
Topsoil	0.4	CY	\$150.00	\$55.56
Sod	20	SF	\$1.08	<u>\$21.60</u>
			Subtotal	\$143.82

Estimated Cost Impact \$1,582.04

Non Responsive

Cost Evaluation for Change Log Item No 33 (Excavate two areas not captured by original design at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>Area 1 (4' x 1' x 6" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.1	CY	\$180.00	\$13.33
Backfill	0.0	CY	\$148.00	\$5.48
Topsoil	0.1	CY	\$150.00	\$11.11
Sod	4	SF	\$1.08	<u>\$4.32</u>
			Subtotal	\$34.25

<u>Area 2 (23' x 3' x 6" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	1.3	CY	\$180.00	\$230.00
Backfill	0.0	CY	\$148.00	\$0.00
Topsoil	1.3	CY	\$150.00	\$191.67
Sod	69	SF	\$1.08	<u>\$74.52</u>
			Subtotal	\$496.19

Estimated Cost Impact \$530.43

Non Responsive

Cost Evaluation for Change Log Item No 39 (Excavate strip on north side of house at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>Area (20' x 1' x 12" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.7	CY	\$180.00	\$133.33
Backfill	0.4	CY	\$148.00	\$54.81
Topsoil	0.4	CY	\$150.00	\$55.56
Sod	20	SF	\$1.08	<u>\$21.60</u>
			Subtotal	\$265.30

Cost Evaluation for Change Log Item No 47 (Gravel Restoration at Non Responsive)
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

<u>Restoration with Gravel</u>	Qty	Unit	Unit Rate	Cost
Backfill	25.1	CY	\$148.00	\$3,711.42
Gravel	4063	SF	\$2.40	\$9,750.00
Topsoil	-75.2	CY	\$150.00	-\$11,284.72
Sod	-4063	SF	\$1.08	-\$4,387.50
			Total	-\$2,210.80

Note: Gravel is specified as 4" thickness, therefore, 2" of backfill required for equivalent of 6" of topsoil and sod. Area and volumes are estimated based on widths of 12.5', 25' and 25' for properties Non Responsive and Non Responsive, respectively, owned by Non Responsive. Surface restoration is not estimated or changed for Non Responsive, Non Responsive which are owned by Non Responsive. Sidewalk width is an assumed 6' based on property drawing. If remaining parcels at the property will have gravel restoration and no plants, additional credit can be achieved for maintenance period.

Cost Evaluation for Change Log Item No 48 (No Excavation under Pavers at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>No Excavation in 18' x 12' Paver Area</u>	Qty	Unit	Unit Rate	Cost
Excavation	-8	CY	\$180.00	-\$1,440.00
Backfill	-4.0	CY	\$148.00	-\$592.00
Topsoil	-4.0	CY	\$150.00	-\$600.00
Sod	-216	SF	\$1.08	-\$233.28
			Total	-\$1,425.28

Note: Design drawing and subcontract costs estimated based on sod restoration in designated area

Cost Evaluation for Change Log Item No 49 (Walkway at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

Line Item	Qty	Unit	Unit Rate	Cost
Miscellaneous Crew Support	4	HR	\$415.00	<u>\$1,660.00</u>
			Subtotal	\$1,660.00

Cost Evaluation for Change Log Item No 51 (Excavate strips at SE corner of the house at

Non Responsive

USS Lead, Zone 3, East Chicago, Indiana

WA No. 226-RARA-053J / Contract No. EP-S5-06-01

<u>Area (14' x 79' x 18" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.4	CY	\$180.00	\$76.81
Backfill	0.3	CY	\$148.00	\$41.68
Topsoil	0.1	CY	\$150.00	\$21.76
Plants-Perennials	6	SF	\$41.00	<u>\$246.00</u>
		Subtotal		\$386.25

<u>Area (32' x 100' x 18" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	1.2	CY	\$180.00	\$222.22
Backfill	0.8	CY	\$148.00	\$120.59
Topsoil	0.4	CY	\$150.00	\$62.96
Plants-Perennials	8	SF	\$41.00	<u>\$328.00</u>
		Subtotal		\$733.78

Total: \$1,120.02

Cost Evaluation for Change Log Item No 54 (Excavate two additional areas: one near air conditioning unit
 USS Lead, Zone 3, East Chicago, Indiana
 WA No. 226-RARA-053J / Contract No. EP-S5-06-01

<u>Area (4' x 8' x 1' deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	1.2	CY	\$180.00	\$213.33
Backfill	0.6	CY	\$148.00	\$87.70
Topsoil	0.6	CY	\$150.00	\$88.89
			Subtotal	\$389.93

<u>Area (3' x 4' x 1' deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.4	CY	\$180.00	\$80.00
Backfill	0.2	CY	\$148.00	\$32.89
Topsoil	0.2	CY	\$150.00	\$33.33

Sod (assumes half the area will be sod, half existing pavers)	6	SF	\$41.00	<u>\$246.00</u>
			Subtotal	\$392.22

<u>Remove five trees in the yard</u>	5	EACH	\$2,950.00	<u>\$14,750.00</u>
			Subtotal	\$14,750.00

Total: \$15,532.15

nit, one on south side of front steps at

Non Responsive

Cost Evaluation for Change Log Item No 55 (Excavate strip on south side of property at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>Area (124" x 13" x 6" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	0.2	CY	\$180.00	\$37.31
Topsoil	0.2	CY	\$150.00	\$31.10
Sod	11	SF	\$1.08	<u>\$12.09</u>
			Total	\$80.50

Cost Evaluation for Change Log Item No 56 (Remove 20' x 20' area and remove stump at
USS Lead, Zone 3, East Chicago, Indiana
WA No. 226-RARA-053J / Contract No. EP-S5-06-01

Non Responsive

<u>Area (20' x 20' x 18" deep)</u>	Qty	Unit	Unit Rate	Cost
Excavation	22.2	CY	\$180.00	\$4,000.00
Backfill	14.7	CY	\$148.00	\$2,170.67
Topsoil	7.6	CY	\$150.00	\$1,133.33
Sod	400	SF	\$1.08	<u>\$432.00</u>
			Subtotal	\$7,736.00

<u>Backyard stump</u>	Qty	Unit	Unit Rate	Cost
Stump removal	1.0	CY	\$2,600.00	\$2,600.00
			Subtotal	\$2,600.00

Total: \$10,336.00